

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

DEVELOPMENT OF TRANSIT CONTROL IN NEW YORK CITY

BY HENRY C. WRIGHT, Secretary City Club of New York.

The aim of this paper is to show the various efforts that have been made to regulate the street railways in New York City and the effect of these regulations on the operation and finances of the companies.

The first grants made by the city were very simple. They consisted merely of a permit to lay tracks and operate cars. Such was the nature of the first franchise issued which authorized the New York and Harlem Railroad to operate a steam road in Fourth Avenue from Twenty-third Street north to the Harlem River. Up to this time, 1831, there was no general railroad act, because there had been no previous applications which might have prompted such a law.

1850 to 1860

Nor was one passed until 1848. Even this made no mention of street railroads. Nevertheless the Common Council proceeded to act as though such powers had been delegated to it, and between 1850 and 1853 it granted several franchises. The validity of these grants was soon questioned. As a result the legislature in 1854 passed an act validating them, and giving power to the Common Council to make grants, providing the consent of a majority in interest of the owners of property abutting the proposed line should have been previously secured. Public notice by publication was also required of the time and conditions of the proposed grant. Though this publication was not in terms a public sale, yet it opened the way for competitive bids. Under this authorization the common council continued to grant franchises until 1860.

The conditions of these council grants were very simple. The company was given the right to lay tracks and operate cars in certain designated streets without limit as to time. Subsequently the companies have interpreted this limitless grant to be a per-

petual right, and have accordingly leased their lines for various periods from 100 to 999 years. However, no New York court has passed upon the particular point as to whether such grants are *de facto* perpetual. Though most of the grants were made without time limit, yet partial exception was made in the case of the Sixth Avenue and Eighth Avenue roads. In their grants the following provisions were inserted:

They shall file with the comptroller a statement under oath of the cost of each mile of road completed and agree to surrender, convey and transfer the said road to the corporation of the City of New York whenever required so to do, on payment by the corporation of the cost of said road, as appears by said statement, with 10 per cent advance thereon.

That said parties on being required at any time by the corporation, and to such extent as the corporation shall determine shall take up, at their own expense, said rails or such part thereof as they shall be required, and on failure to do so in ten days after such requirement the same may be done at their expense by the street commissioner.

This is the first instance of a revocable street railway grant in the city, and in fact the last. Though it is a form generally considered to-day to be the most desirable, it has not been resurrected since those early days. But recently the Metropolitan Street Railway Company proposed a draft form of ordinance designed to limit the number to be carried in a car to sixty-five. This form of regulation was somewhat anticipated by the following provision put in the grant to the Broadway Railroad:

Cars shall be so constructed as not to make provision intended for standing passengers to crowd upon the seated passengers, and also when all the seats are full the cars shall not be stopped to take in more passengers to be crowded into the said seats, a flag being displayed in front of the car to give notice that all the seats are full.

These instances of attempted regulation were sporadic and evidently were not taken seriously, as they were not obeyed and no attempt was made to enforce them.

The compensation to the city at this time was upon the basis of a car license. The usual amount designated was \$20.00 per car per year. In 1858 a general ordinance was passed providing that

Each and every passenger railroad car running in the City of New York below 125th Street shall pay into the city treasury the sum of \$50 annually for a license, a certificate of such payment to be procured from the mayor, except the small one-horse passenger cars, which shall pay the sum of \$25 annually for such license as aforesaid.

A certificate of such a license was to be hung in each car. A failure to comply with this requirement was subject to a fine of \$50.00. The requirement that the car license be hung in view of the public was not obeyed and varieties of excuses were found for not paying the charge. To such an extent has this tax been evaded that the company in Manhattan to-day owes the city not less than \$290,000 for its unpaid licenses.

In some grants certain headways for the running of cars were required, demanding, for instance, a schedule of not less than one car every four minutes in the early evening hours. A stipulation that not more than a five-cent fare be charged was inserted in most of the grants, and this seems to be about the only requirement of the franchises that the companies lived up to. In 1855 the legislature created a state board of railroad commissioners with power to investigate the cause of accidents, pass upon the by-laws, rules and regulations of railroad companies, to require special reports, and to inspect all books and papers of such companies. After two years of existence the board was abolished because its powers were too drastic and it served no useful purpose.

The chief characteristic of this decade from 1850 to 1860 was the granting of franchises by the local authorities and the imposition of a car tax showing that the franchise was considered of some value.

1860 to 1875

In 1860 an act was passed providing that all street railway franchises should be granted by the legislature. This act remained in force until 1875. During this period the legislative grants usually contained the following provision:

Said railroad shall be constructed on the most approved plan for the construction of city railroads, and the cars run as often as public convenience shall require, and shall be subject to such reasonable rules and regulations in respect to streets, in the transportation of passengers and freight in suitable cars, as the New York City Common Council may from time to time by ordinance prescribe, and to the payment to the city of the same license fee annually for each passenger car run thereon as is now paid by other city railroads in said city.

Though the common council was empowered to pass ordinances regulating the handling of cars, they exercised this privilege to a very limited degree in this period. In fact, there are but three general ordinances of any note to be found. One required that all cars should be provided with headlights; another that snowploughs could be used only by permit from the mayor and when used the snow thrown up by them must be removed; the other created the position of inspector of city railroads. One might infer by the title that such an officer would have been given considerable power. His only function, however, was to inspect the pavement laid along the tracks of the street-car companies.

The local authorities in that period advanced but very little in the regulation of street-car companies. On the other hand, the legislature made considerable progress. The basis of compensation was changed from that of a car license which prevailed between 1850 and 1860 to a portion of the receipts. From 1860 to 1872 the grants prescribed that 5 per cent of the *net* receipts should be paid yearly. Thereafter the basis was changed to a percentage of the gross receipts. In most cases it was stipulated that during the first five years of operation 3 per cent of the gross receipts should be paid; thereafter the payment was to be 5 per cent. This change from the basis of net to that of gross receipts is worthy of note. In a few cases provision was made that grants should be let to the highest bidder on the basis of a lump sum paid for the franchise.

In 1871 a franchise was granted to the New York Railway Company to build an elevated structure on the East Side, and in its grant was a provision that all trains between the hours of 6 and 8 a. m. should contain two cars of a capacity of forty-eight seats in which a fare of not over five cents should be charged. Since the usual charge on the line was more than that amount, the provision was an early recognition of a regulation which is to-day generally used in England, viz., a lower fare for workmen.

1875 to 1884

In 1875 the new state constitution provided that no franchises for street railways could be granted by the legislature except under a general street railway act. The consent of the local authorities was also required. The legislature, however, did not pass a gen-

eral act of such a nature until 1884. As a result no grants were made in the following period of nine years.

Though the Common Council made no new grants, yet it manifested a slight tendency to attempt to regulate the operation of the roads. We complain to-day when the temperature in our electrically-heated cars falls below 60°. Such dreams of comfort were not entertained in those days. They were fortunate if the Board of Health enforced the ordinance passed by the Common Council directing it to require of the railroad companies "That clean straw be provided for the floor of every car," in lieu of any artificial heat.

In 1877 the council gave a permit to the Third Avenue Railroad Company to experiment with steam motor power with five cars. As a condition of such permit it was required that "all cars so used experimentally on said railroad shall contain a certain number of separated seats, and when all are occupied, said cars shall not stop to take up any passenger until one or more seats shall be vacated. When all the seats are occupied a placard shall be placed in a conspicuous position on the outside of the car, inscribed with the word 'full.' When vacancies occur it shall be taken down by the conductor." No historian has recorded whether any of these cars ever acknowledged itself to be "full." Within the memory of the present generation they have chronically been in that questionable state without even an outward placard of acknowledgment.

An important act, however, was passed in 1875, which was the forerunner of our present rapid transit act. This act empowered the mayor to appoint a commission of five to be known as the Commissioners of Rapid Transit. Their function was to "locate the route or routes of all steam railroads in the city." This included elevated and tunnel roads. In 1882 commissioners appointed under this act recommended that certain roads be built, but inasmuch as they provided no compensation to the city, the mayor disapproved the recommendation. The ordinance subsequently passed was amended to require 5 per cent of the yearly dividends. Various Commissions were appointed between 1875 and 1891 who recommended many different routes, but no roads were built under their authority.

In 1882 a State Board of Railroad Commissioners was created, designed to be an investigating, reporting and regulating body. It was given the power to investigate the operation of the railroads

and their accidents; to prescribe the form of report to be made to the state; to order repairs, additions and rolling stock, extra facilities, rates of fare, and mode of operating the roads. None of these orders, however, could it enforce. Its power was confined to "presenting the facts to the attorney-general for his consideration and action." The board accomplished little other than the publication of financial reports of the various companies—reports which in many cases were gross misstatements and erroneous on their face. Such discrepancies, however, seemed never to be noticed by the commissioners. The board operated as a protection to the railroads rather than as a corrective body, by permitting stock and bond watering, and by restraining attempted legislation that it did not recommend. These functions it retained with no important amendment until it was supplanted by the public service commissions in 1907.

In the period from 1875 to 1884 no new franchises were granted, and the council passed very few ordinances designed to regulate the operation of roads then existing. Practically no advance was made either in the conception of the proper terms on which a public franchise should be granted or in the demands made upon the companies holding franchises.

1884 to 1891

In 1884 a general act was passed providing for the incorporation of street railway companies. The act provided that the consent of the local authorities must be obtained, as well as the consent of the owners of one-half of the abutting property; that ample notice of the intent to issue a franchise must be published; that payment of 3 per cent of the gross receipts for the first five years and 5 per cent thereafter should be required. The local authorities were empowered to make reasonable regulations as to the mode of use of the tracks.

Following the act several companies were incorporated and began to build lines. In the franchises of each of these companies was the provision that they should be subject to the regulation of the local authorities, and in addition to paying the highest price bid at public auction, they were to pay 3 per cent of the gross receipts for the first five years and 5 per cent thereafter as prescribed by the law of 1884.

This was a very decided advance in the requirements of a (557)

franchise. Had these requirements been lived up to the city would have received a fair return and would have secured reasonably good service through regulation of ordinances. The local authorities, however, since that time have received but a small portion of the required percentage of the gross receipts, and such ordinances as have been passed almost totally failed to secure an adequate service.

That a clearer view of the value of a franchise and of the rights of the people began to develop at this time is indicated by the conditions inserted in the grant made to the Ninth Avenue Elevated Railroad. It required, that

In pursuance of Section 9 of the act aforesaid, it is directed that the said constructing company, or its successor, shall, in the month of January in each year, and quarter-annually thereafter, pay to the comptroller of the City of New York 5 per cent of its net income, for the purpose of being expended in the improvement of the condition or appearance of the streets, or parts of streets or avenues, or places through which elevated railroads may hereafter be located, or constructed, by demonstrating the practicability of making said structure more ornamental in appearance, and by introducing such new or improved methods of operating the same as may tend to obviate such objectionable features thereof as injuriously affect the condition of such street or avenue.

It was evidently recognized that the elevated structure then built, and still existing, was not ornamental but was even objectionable in many regards, and it was supposed that a means was being provided by which a fund would accumulate that would permit of experiments which would obviate the defects. Unfortunately, however, the law provided that the company should pay to the city a percentage of its *net* receipts, supposing, of course, that there would be *net* receipts. But, sad to relate, not since that day have any *net* receipts been discovered, so the experiments have never been tried, and we are still subject to the nerve-racking noise and the crudity.

1891 to 1907

In 1891 a law was passed called the Rapid Transit Act. It provided that five commissioners should be appointed by the mayor. These commissioners were authorized to select routes and prepare plans for rapid transit roads and to let to the highest bidder. The board was free to prescribe the terms and conditions of sale, except

that the franchise should be "for a definite term of years" at the discretion of the board. No power of regulation was granted to this board, and the only condition in the act designed to regulate service provided that the company "shall furnish sufficient accommodations for the transportation of all such passengers and property as shall within a reasonable time previous thereto, be offered for transportation at the place of starting and at usual stopping places." No franchises were granted or roads built under this board. It became evident that to be effective the act needed much amending.

In 1894 the Rapid Transit Act was amended and took a form which in its chief points remained the law until 1906. The five commissioners appointed by the mayor in the former act were supplanted by a board of eight, three of whom were to be exofficio, the mayor, the comptroller, and the president of the Chamber of Commerce. The remaining five were named in the act—leading business men of New York City whose integrity and ability were unquestioned. They were intrusted also with the function of filling any vacancies occurring in the board, so that it became a self-perpetuating body.

This method of creating the board established a new precedent. Though its functions were purely local, yet its personnel was dictated by the legislature. Much remonstrance arose at this interference by the state body, both on the part of those who really believed in good government but yet held to local autonomy, and from those who were deprived of the patronage this board could furnish. Others, however, who firmly believed in local control, yet felt that a board whose acts would affect not only the present generation but future ones also, should be removed as far as possible from the influence of politics, regardless of the demands of theoretical democracy.

The period for which a lease could be given was no longer left to the discretion of the board, except within narrow limits. Provision was made that the maximum period of such lease should not be more than fifty, the minimum not less than thirty-five years. No doubt these limits were prompted by the idea that reliable capital could not be induced to invest for a less period than the maximum named, and that bidders who might be willing to accept a lease of less than thirty-five years would not prove satisfactory or safe.

As an additional inducement to capital it was provided that the investment under the lease should be exempt from taxation. A condition was also inserted that a contract should be let only to the person who would construct, equip and operate. The motive for this provision no doubt was the feeling that if the person who was to equip and operate were to construct, it would guarantee a speedy and economic carrying out of the building of the line. The inference was proven to be well founded when the present subway was subsequently constructed. It was finished and put in operation in what was record time for so large an undertaking.

Provision was also made for submitting to a vote of the people the question of the advisability of the city's constructing a specific road which had been decided upon by the board. This applied to New York City as then constituted, consisting of Manhattan and a part of The Bronx. On consolidation the vote was declared to be effective in the enlarged city. At the next general election the following questions were placed upon the ballot: "For municipal construction of rapid transit road" and "Against municipal construction of rapid transit road." By a large majority it was declared to be the will of the people that the subway should be constructed by the city. The vote, which was on the question of the construction of a specific subway, later came to be interpreted as a vote for municipal construction of all rapid transit roads.

In case the city's money were to be used, it was provided that the contractor should pay as rental to the city for the use of such road an annual rental equal to the interest on the bonds issued by the city and in addition, one per cent was intended to be set aside as a sinking fund which would produce a fund nearly sufficient to retire the bonds at their maturity.

Authority to provide for the welfare of the traveling public was given the board. They could let the contract "upon such terms and conditions as to rates of fare to be charged and the character of service to be furnished and otherwise as said board shall deem to be best suited to the public interests, and subject to such public supervision and to such conditions, regulations and requirements as may be determined upon by said board." Conditions as to service and supervision then became a matter of contract between the operator and the city.

Simultaneously with this advance in the provision for rapid (560)

transit roads occurred a movement for consolidation of the many surface lines. William C. Whitney, Thomas F. Ryan, and P. A. B. Widener began, in 1892, through the formation of the Metropolitan Traction Company as a New York State corporation, to create a monopoly of the surface lines in New York City. They obtained the Houston Street road, which was used as the basis of their company. To it they leased such roads as came into their possession. In 1894, the year the amended and modern Rapid Transit Act was passed, they formed the Metropolitan Street Railway Company. The following year they reported to the state railroad commission that they owned 38.29 and leased 101.46 miles of the 275 miles of road then existing in New York City. To-day the company owns or has control by lease of all of the lines in Manhattan.

During this consolidation a movement was put on foot to revise the charter of the city. This resulted in the enactment of a new charter by the legislature in 1807. At the same time the greater city was created. In this charter was inserted the provision that all franchises for surface roads should be granted by the city and for a term not exceeding twenty-five years, at the expiration of which the property in the street should become the property of the city. To further safeguard the letting of franchises a bicameral board was created, both branches of which should pass upon proposed franchises. This was further guarded by the requirement that the Board of Estimate and Apportionment should pass upon its terms. The latter board was composed of the mayor, president of council, president of the department of taxes and assessments, and the corporation counsel,—a body supposed to be conservative by its make-up and familiar with the needs of the city. Before final action could be taken upon any franchise its terms must have been advertised for at least twenty days, and a three-quarter vote of each house required. To override a veto by the mayor a fivesixths vote was necessary. Under this arrangement but two franchises were granted, which were much superior to any heretofore granted by the city.

The bicameral board was abolished in the revised charter of 1902, and the present board of aldermen substituted for it. The power of passing upon a franchise, however, was transferred to the new board, which proceeded to use its new power in an obstructive way. The Pennsylvania Railroad sought the right to build

a connecting railroad between the New Haven Railroad and its lines extending into Long Island City. The Board of Aldermen held up the grant for reasons best known to an inner circle of that body. As a result of this hold-up its power to pass upon franchises was taken away from it by the legislature of 1905 and couched in the Board of Estimate and Apportionment only, where it remains to-day.

The Board of Rapid Transit created in 1894, did not succeed in contracting for a subway until 1901, when it granted a lease to John B. McDonald, who transferred his right to the Interborough Rapid Transit Company. Under this contract the city furnished the money, \$35,000,000, with which to build the subway. The contractor provided his own equipment. He was given a lease for fifty years with a renewal of twenty-five years, during which time he agreed to operate the road according to the highest known standards of railroad operation, and to furnish the public adequate accommodation up to the capacity of the road. If he failed to live up to this agreement his contract could be annulled.

The subway was completed and put in operation November, 1904, and from the very first it became congested. Though its method of operation was of the highest standard, yet not enough trains were operated to supply the needs of the public. The people grew restive because they felt the Board of Rapid Transit should compel a better operation. The power which they had under the contract was not used to secure adequate service. In addition to this inaction on the part of the board no more subways were put under contract. The explanation was that the present operating company did not then desire to build more subways and no other companies had manifested any such desire.

The sentiment of the people at this inaction crystallized in the form of a bill introduced into the legislature in 1906 known as the Elsberg bill. It provided that the term of a lease should not be more than twenty years with a renewal of twenty years, and that contracts for construction, equipment and operation could be let separately or jointly at the discretion of the board; or the city could build and operate. The bill became law. The sponsors of the law hoped that by permitting the city to build a subway and then to lease it for operation, there would be live competition among bidding operators. It was soon discovered that the city had so

nearly reached its debt limit that it could not undertake extensive subway building and private capital could not build according to the interpretation put upon the referendum vote of 1894. As a result during the next year no new roads were put under contract, and there seemed little prospect that the next few years would change this stalled condition.

The foregoing gives in merest outline the stages of attempted legislative control from 1850 to 1907. There now remains to be told the effect of these various attempts on the management of the roads.

Finances

The State Railroad Commission came into existence in 1882, and, among other functions, it was directed to supervise the financing of railroad companies. Before additional stock could be issued or bonds placed out, application for such permit must be made to this commission. This supervisory power was supposed to extend to an examination of the status of an applying company, and an examination as to its need for the prayed-for issue, and its ability to retire the bonds and to pay dividends upon the stock. Subsequent to such issue the commission was directed to ascertain whether it had been spent for the object specified in its application for the issue. The theory of this regulation was good; the practice may be judged by some of the figures which follow.

In 1886 the total outstanding liabilities, including capital and funded debts, of the surface lines of the city were \$35,486,923. Between this date and 1896, all of the lines remained in practically the same condition except the Broadway and Seventh Avenue and the Third Avenue line. On these two lines 22.56 miles of single track were transformed from horse to cable power. In addition 15.40 miles of cable were built on the Lexington Avenue and Pavonia Ferry line. During the last year of this decade also the first electric line in the city was built on Lenox Avenue from 116th Street to 146th Street, being about 3.62 miles of single track. The transformation from the horse to the cable line may be assumed to have cost as much as laying a new road. The counsel of the Third Avenue road stated before a committee of the New York Assembly in 1895 that the cable road in Amsterdam Avenue cost about \$50,000 per mile of single track. Assuming this to be a fair

estimate of the cost of such construction, on this basis 37.90 miles of cable track laid since 1886 cost \$1,895,000. The laying of an underground electrical system costs somewhat more than a cable The receivers of the Third Avenue railroad on March 7, 1908, applied to the United States Circuit Court for the authority to expend \$277,305 for the electrification of 6½ miles of horsecar track from 50th to 125th Street on First Avenue, which would be at the rate of about \$42,600 per mile. This does not include power-house or equipment expenditure. An article in the "Street Railway Journal" in December 1897, stated that according to the estimate of the engineers of the system, the Madison Avenue line cost not far from \$100,000 per mile to electrify. At this latter rate the 3.62 miles electrified in this period would have cost \$362,000. The cable and electrical transformation of the decade cost \$2,257,-000. In addition to the above the Thirty-fourth Street line was built, consisting of 1.62 miles, operated by horse, costing not more than \$32,400. A few new cars were purchased and some rails renewed, which in the aggregate probably would have been covered by a few hundred thousand dollars. If we assume the total expenditure for improvements to have been \$5,000,000, the increase in indebtedness during the decade should not have been more than this amount. We find, however, that it had actually increased from \$35,486,923 to \$76,266,810, or an increase of \$40,779,887. The greater part of this increase of indebtedness occurred after 1802. when the Ryan-Whitney-Widener onslaughts began.

Between 1896 and 1906 the only new lines built were horse lines on Twenty-eighth and Twenty-ninth Streets, and also on Fulton Street, a total of 6.76 miles, costing perhaps \$140,000. The chief improvement was electrification of old lines. In all 165.74 miles of single track were transformed from either horse or cable to the underground contact system. The cost of this improvement, estimated at \$100,000 per mile for 127.78 miles of horse track, was \$12,778,000, and of 37.96 miles of cable track where the conduits were already built, at \$60,000 per mile, was \$2,277,600, or a total of \$15,195,600, including the new lines. This includes the cost of power houses.

According to the 1906 report of the State Railroad Commission the total number of electric cars in Manhattan was 3,379. The cost of these cars varies from \$2,500 to \$3,500. A valuation of

\$3,000 would be a liberal estimate for the type of cars in use. Assuming that 4,000 were purchased at this price, the cost would have been \$12,000,000, which, added to the cost of electrification of the roads, makes the total expenditure for improvements during the decade \$27,195,600. Lest we have omitted some expenditures that should have been included, let us swell this figure to \$35,000,000 as the total outlay for the period. This, added to the total liabilities reported in 1896, should make the indebtedness in 1906, assuming none had been paid off, \$111,266,810.1 On examining the reports of the companies in the 1906 report of the state railroad commission, we find that they place their total outstanding liabilities not at this figure, nor at any figure approximating it, but at \$234,-342,823, an increase above a most liberal estimate of nearly \$125,-000,000. Some details of this marvelous increase of indebtedness will be of interest. The Thirty-fourth Street crosstown line, which has a length of somewhat less than a mile, to be accurate, .952 mile, cost not to exceed \$25,000. During this period it was electrified at a cost within \$150,000. At a liberal estimate the road, with all of its improvements, could not have cost to exceed \$200,000, yet we find it saddled with a debt of \$6,472,287. The Fulton Street horsecar line, which is one mile in length, and cost possibly \$25,000, a line which still uses horses as motive power, now has an indebtedness of \$2,553,007. This is a fair sample of the increases which go to make up the total swollen indebtedness of \$125,000,000 beyond a reasonable estimate of the cost. It is needless to remark that this amount of money has not been expended on these roads, nor has it been accounted for.

Nor is the full story told. While all this money was disappearing little of it went toward payment to the city for franchises and car licenses. To-day the city claims that the street-car companies owe for these items not less than \$13,000,000.

Accidents

In 1896, it will be recalled that there were about thirty-eight miles of cable road, less than four miles of electric road, and the remainder horse track. That year there were reported but fifteen

¹Since writing the above Mr. William M. Ivins, special counsel of the Public Service Commission, in a paper read at the City Club on March 16th, estimated that the whole Metropolitan System could be replaced or rebuilt at a cost of \$106,500,000. This includes 206 miles of trolley road in The Bronx, not included in the above estimate of the original cost of the system in Manhattan.

killed, including employees, passengers and others. By the same lines in 1906 the number of killed was eighty-seven. A part of this increase was to be expected, owing to the greater speed of electric cars and the larger number of people in the city. Its multiplication by six, however, at once suggests a gross carelessness on the part of the operating company and a neglect of well-known safeguards. Fenders have been removed from practically all cars in Manhattan and nothing in the form of a dash protection or of an adequate wheelguard has been substituted, though in some other cities such have been in successful operation for years.

Equipment

The wiring of the cars and motors had been so neglected that an unwarranted percentage of the cars in operation daily were run back to the barns because of burnouts or other injuries which put them out of service, indicating a serious neglect and gross mismanagement. Flat wheels were annoyingly frequent. Many inquiries from conductors and motormen failed to discover one who knew of any of the cars having been washed. The paint on the cars was so old that the public ceased to look for a new dress and contented themselves with any vehicle which would carry them, no matter how unsightly.

Operation

The orders of the state railroad commission or the ordinances of the board of aldermen had little if any effect in securing adequate service on the surface lines. During rush hours just enough cars were operated to carry the people with no attempt to furnish seats. A count made by the City Club on June 17, 1907, of the cars and passengers on the Madison Avenue line revealed the fact that between 5.30 and 6.30, 5,000 passengers were carried in eighty-five cars with 4,134 seats, or an excess of 1,326 passengers over seats. On the Twenty-third Street line a similar condition was found. For 3,728 passengers 2,864 seats were provided during the same hours. Other lines were similarly congested. As an answer to this complaint the company claimed that the tracks would accommodate no more cars.

The subway, which was under the supervision of the Board of Rapid Transit, was doing but little better. During the rush hours

on the express tracks but twenty-seven trains per hour were being operated, carrying 25,413 passengers and furnishing but 11,232 seats. Even on Sunday, when there was no possible excuse for not operating more cars, 13 per cent of the passengers were made to stand. This condition existed in spite of the fact that the company was under contract to furnish the best accommodations possible up to the capacity of the tracks. The Board of Rapid Transit was not compelling the company to carry out its contract.

The congestion problem at the terminals of Brooklyn bridge had for a long time been almost unendurable. This was largely owing to the fact that the company in Manhattan was very jealous of any encroachment by the company in Brooklyn. In the meantime the Commissioner of Bridges had supervision of the operation of cars over the bridge, and through his chief engineer he fostered rather than attempted to relieve this congestion. Though more passengers were carried per mile of road than in any other city in the United States, yet there still remained over eighty miles of horse-car track with the most antiquated cars.

In short, the general policy of the operating companies was to reduce the operating expense to the lowest point possible and still keep sufficient cars going to transport the passengers. The city which could afford the best of transit service because of its dense population, and which needed the best because of the hundreds of thousands of strangers constantly within its borders had in fact, a service scarcely exceeded in the United States for its shortcomings.

Such was the condition when Charles E. Hughes took his seat as Governor of New York State on January 1, 1907. In his message transmitted to the legislature on that day, he emphatically called attention to the need of legislation designed to secure a better supervision and control of public service corporations. A bill was drafted, largely under his supervision, to accomplish this purpose. It at once attracted the keenest attention from civic workers, business men and public service corporations. Several hearings were held before the committees having the bill under consideration at which the ablest lawyers in New York appeared on behalf of these companies. To the surprise of everyone the attitude taken by these corporations was different from that assumed at any former time. There was apparently no effort to influence the legislature by money or other inducement; on the contrary, they plainly

stated that they thought the time had come when the people demanded some such legislation. Their only endeavor was to amend the pending bill so as to make it as weak as possible. Even this mild attempt, however, was ineffective. The governor appealed to the people and the legislators passed the bill in the form approved by him.

The powers conferred by this law are probably greater than have ever before been placed in the hands of any state or federal commission dealing with public service corporations. One corporation representative, before the bill was passed, expressed the hope that companies might still have the privilege of selecting the color for their cars. It is not quite so dominating as his remark might lead one to think, yet it does control to a degree unknown before.

The law provided for two commissions of five members each, one to have jurisdiction in the counties comprising New York City and the other in the remainder of the state. Their jurisdiction extends over all common carriers, including express companies, and over gas and electric companies. It is highly probable that the legislature of 1908 will place telephone and telegraph companies under their jurisdiction. These were omitted in the first law only to reduce the opposition that would be brought against the bill.

For the purpose of this paper the powers which apply to street railroads only will be described. In defining a street railroad company the law uses these words: "The terms 'street railroad corporation,' when used in this act, include every corporation, company, association, joint-stock association, partnership and person, their lessees, trustees or receivers appointed by any court whatsoever, owning, operating, managing or controlling any street railroad or any cars or other equipment used thereon or in connection therewith." This seems to leave out of consideration the holding company, but in the body of the bill these words are found: "No stock corporation of any description, domestic or foreign, other than a railroad corporation or street railroad corporation, shall purchase or acquire, take or hold, more than 10 per cent of the total capital stock issued by any railroad corporation or street railroad corporation or other common carrier. " By this the holding company of whatever form is placed under the jurisdiction of the commissions. The law provides that the commissions shall have control over all receivers by whatever court appointed. Unfortunately, however, the federal law is supreme, and when the United States Court appoints a receiver, as it has done for the New York Railway Company, he need not obey the order of the state commission.

The commissions are empowered to hold hearings on any complaint, or to initiate any inquiry; they may summon witnesses under oath, and no witness need be released from the duty of giving evidence on the ground that it will tend to incriminate him. This enables the commissions to secure any evidence which may be of value to them, unless, perchance, evidence has been destroyed, as were the books of the Metropolitan Company after its lease to the Interborough.

The old state railroad commission required that all accidents be reported. Accordingly, at the end of the year, among other things, a little table was presented, giving in total, merely, the number killed and injured. The new commission requires that all accidents shall be reported "immediately." By interpretation this means that as soon as an accident is reported to the office of the transit company it shall be forthwith telephoned to the commission, in order to enable them to investigate it at once. The necessity for such a provision may be better understood when we know the startling number of accidents caused by car lines. In twenty-seven days there were 5,500 accidents; 42 killed, 10 skulls fractured, 10 limbs amputated, 44 limbs broken, and 83 passengers otherwise injured. The railways in New York City kill, on an average, over one person a day and injure many times more than that.

The power of the commission is not confined to an examination of the things done by the railroad, but it "may investigate or make inquiry in a manner to be determined by it, as to any act or thing done or omitted to be done." So it does not wait for complaints, but sends its investigators out to ascertain whatever shortcomings may be discovered.

It may be asked: Suppose the commission does find the service deficient, and suppose on examination it is discovered that the company has not enough cars, or that they are not in shape to be operated, what can be done about it? The old State Railroad Commission could order on more cars, which order the companies would ignore. Then the only recourse was to have a suit brought by the attorney general, compelling them to obey. These suits, however,

were never brought, so the orders were never carried out. The power given to the present commission regarding service reads as follows: "And whenever the commission shall be of opinion, after a hearing had upon its own motion or upon complaint, that the regulations, practice, equipment, appliances, or service of any common carrier, railroad corporation or street railroad corporation in respect to transportation of persons, freight or property within the state are unjust, unreasonable, unsafe, improper, or inadequate, the commission shall determine the just, reasonable, safe, adequate and proper regulations, practice, equipment, appliance and service thereafter to be in force. " If the company fails to obey any order when given, it is subject to a maximum fine of \$5,000 for each and every offense, and "every violation of any such order or direction or requirement of the act shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance thereof shall be and be deemed to be a separate and distinct offense." It will thus be seen that the penalty is sufficiently large to prompt obedience, and multiplies itself by each day of its continuance. The power of applying the penalty thus lies in the hands of the commission—the ordering power. Likewise the commission can order any repair needed for the safety or convenience of passengers in "any tracks, switches, terminals, or terminal facilities, motive power, or any other property or device used by any common carrier. . . ." It can issue orders for any number of extra cars, or establish the schedule upon which they shall be run.

Not only can no railroad be constructed without the consent of the commission, but no franchise or right shall "be assigned, transferred or leased, nor shall any contract or agreement with reference to or affecting any such franchise or right be valid, or of any force or effect whatsoever, unless the assignment, transfer, lease or contract or agreement shall have been approved by the proper commission." This power readily controls the disposition of franchises so that they cannot be secured simply to keep others out of the field or to sell at a profit. No longer need the legislature blindly pass laws as to the rate of fare, since the commission can, after painstaking inquiry, establish what it considers a just and reasonable rate for the transportation of passengers.

The day is passed when a Ryan or a Whitney or a Widener (570)

can double or treble the liabilities of a transit company. Hereafter no company can issue stocks, bonds, notes or other evidences of indebtedness without the consent of the commission. Such power on the part of the commission, however, would not be very effective unless they could ascertain with definiteness just the present financial condition of the applying company. This power is given The law provides that "the commission shall at all times have access to all accounts, records and memoranda kept by railroad and street railroad corporations, and may prescribe the accounts in which particular outlays and receipts shall be entered. This power to designate the form in which books shall be kept and the right of subsequent inspection enables the commission not only to act wisely in the regulation of fares and on the application for an increase of indebtedness, but also enables it to fix the terms and conditions of franchises with fairness both to the people and to the companies.

Everyone was alert to see the type of men the governor would appoint as commissioners to be entrusted with the great power of this new law. The former Rapid Transit Commission was composed of men of the highest standing in the business world, and most of them were independently rich. If he were not to appoint men who had proved themselves a success in business, then whom could he select sufficiently experienced to give wise judgments? This question was the question universally asked. Such questions were soon answered by the announcement of his choice. five men comprising the commission of the First District,-New York City, with which this article deals, were as follows: William R. Willcox, chairman, formerly postmaster in the city for a little over two years; Milo R. Maltbie, who is known as a writer on and investigator of municipal subjects; William McCarroll, a business man; Edward M. Bassett, ex-congressman, and John E. Eustis, formerly park commissioner in The Bronx. None of these were of the class of so-called big business men. But one of them, Mr. Maltbie, had any special knowledge of municipal transit, and none of them had gained any special knowledge of the inner operation of public service corporations. The public was unaccustomed to such appointments by a governor, and the newspapers were at a loss to know how to treat the appointments editorially. The essence of all the expressions was, "Well, we will hope for the best,"

These men, at this writing, have been in office eight months. Let us see whether the governor was justified in his choice, and whether the law is proving effective.

Their first problem was to get together a working force both for office and for field work. Inasmuch as most of these had to be secured through the state civil service, and an eligible list had not been prepared for this purpose, they were greatly hampered in procuring the needed men. Regardless of this fact they went to work endeavoring to do what could be done by means of public hearings and a small force. Special counsel William M. Ivins was employed to examine into the operations and financial conditions of the transit companies. These hearings continued more or less regularly until October, when it seemed best to discontinue them on account of the financial panic. In the meantime, however, the current rumor of the watered condition of the companies was proved to be based on fact, and the people first authoritatively learned the extent of this inflated capitalization to which they were paying tribute by their nickels. Much other valuable information was obtained as to the history and relation of the companies, their method of operation, schedules, etc. It was in a sense a synoptical view of the situation which showed the commission the direction in which to move and the first things that ought to be accomplished.

Hearings upon specific complaints were simultaneously begun. The method of handling these hearings was to investigate the conditions complained of, and if they were, in the opinion of the commission, such as should be corrected by the company, thereupon a preliminary order was issued to the company to show cause why they should not make certain changes specified in the order. Usually several hearings would be held upon such an order at which the commission would record its observations and the company make answer. If the commission became convinced that the preliminary order could and should be carried out by the company, it was then made final and commanding.

These orders have covered a variety of shortcomings of the transit companies. The following are a few examples: The City Club had made complaint of the congested condition of the cars on various lines. An examination of the conditions complained of was made by the commission's inspectors, and were found to be substantially true. Hearings were held and the company was or-

dered to put on many more cars on various surface lines, which they obeyed. Similar observations were made on the elevated roads. resulting in orders for more cars, subsequently the required number of cars were run by the companies. Of orders increasing the number of cars on the elevated roads there have been six, all of which have been obeyed; on the surface lines nine orders which have likewise been obeyed. The surface cars of the Metropolitan Company were examined with great care, and as a result an order was given to put in good repair thirteen per day. The cars of a certain line crossing Brooklyn bridge were proved to be in such bad repair that they were constantly breaking down and delaying all other cars. All the cars of this line were ordered repaired. Additional station signs have been ordered on the Brooklyn Elevated Railroad stations. Certain lines in The Bronx that do not carry many passengers have been ordered to run enough cars and at such headway as to provide a seat for every passenger. Additional cars were ordered on the Madison Avenue line. The company made answer that the line at present was accommodating as many cars in the rush hours as could be run upon it, and, moreover, they could not get more motormen. A thorough examination was made by the commission of the capacity of this line, of the wages paid by the company, and of the average length of time the men stayed in their employ, with the wages given. When the company discovered that all this detailed knowledge was in the hands of the commission, they agreed to obey the order and the required additional cars were put in operation.

This is the first time the transit companies have felt obliged to obey the orders of anybody. Improvements have been made voluntarily before, but only when the degree of congestion reached the point of saturation. No attempt heretofore has been made to furnish seats to passengers. As long as there was room for an additional passenger to squeeze into a car, the number of cars has been considered by the companies to have been sufficient. The commission is now going on the assumption that a passenger should be furnished a seat if it is possible to operate sufficient cars. Although this ideal condition has by no means been reached at present, yet orders are given looking to that end, and eventually this heretofore unattainable accommodation may be realized.

The financial problem of the companies is a much more diffi-

cult problem to solve. The commission has power to restrain them henceforth from issuing more stock or bonds than are actually needed for the improvements of their roads, but how to handle the \$234,000,000 of indebtedness of the surface lines of Manhattan, is a problem of much larger proportions. These lines cannot give adequate service and pay interest on their indebtedness and dividends on their stock. If these roads were capitalized at what it would cost to rebuild them, they could give a service better than that furnished by any lines in the United States and pay very attractive dividends.

The problem before the commission is to secure ample service for the public from the companies and yet at the same time protect, as far as may be reasonably possible, the stockholders who have been led blindly into the den of the transit robbers. The only line of action open to them seems to be to demand of the companies the needed service and let the marked-down value of stock and the receivers' courts solve the resulting situation.

There is general satisfaction with the results accomplished by the commission. Complaint, of course, is made in sections of the city that they have not put under contract more subways. Their action in this line, however, is restrained by two factors: First, confirmation is needed by the Board of Estimate and Apportionment, who have the power to appropriate money; second, the nearness of the city to the debt limit authorized by the state constitution. An effort is being made during the present session of the legislature to so amend the Rapid Transit Act as to permit the use of private capital for the construction of subways. At present, according to the interpretation put upon the referendum vote of 1894, only the city's money can be so used.

The question is often asked: Is there anything in this law that makes it automatically more operative than that under which the former state board of railroad commissioners acted? Does not the execution of the law depend entirely upon the character of men on the commission? They have much more power than the other board, but politics might enter in and so change the personnel of this commission that this power would not be exercised and little be accomplished under the law. This contingency may arise, and in fact the more nearly the present members do their duty the greater the likelihood that they will be displaced by some future governor

who yields to the pressure from the corporations. The safeguard against this is that the people are exercising their power and rights as never before, and a governor who ventures to supplant any of the present members by tools of politicians will undoubtedly feel their wrath in no uncertain manner. There is no other assurance than this that the law will continue to be effective.

The powers of this commission as compared with the conditionless grants of the period of 1850 make a striking contrast. It has taken an experience of fifty years to make clear that the rights of the next generation are to be secured in the present. The remark of Oliver Wendell Holmes that the reformation of an individual must begin with his grandmother, is equally applicable to the finances of public service corporations. We must rectify the neglect of our forefathers as best we can—our present attempt is in the form of the Public Service Commission. It is full of promise. Only time will show whether its accomplishments measure with its tasks.